



PRE AND POSTPARTUM LOW PRESSURE FITNESS

Low Pressure Fitness (LPF) originated in the 80s as a postpartum therapy. The objective was to find a technique that would help the recovery of the woman's abdominal and pelvic floor muscles without causing any of the negative side effects such as diastasis, prolapses and urinary incontinence that were brought about by the traditional abdominal exercises such as sit-ups.

LPF significantly reduces the intra-abdominal pressure (thoracic, abdominal and pelvic). This decrease is the same in all areas of intra-abdominal space, roughly 70mm Hg.

Research shows how effective LPF is for enhancing the pelvic floor, improving posture, respiratory and blood parameters, reducing waist size and back pain, resolving urinary incontinences and prolapses, (Burk, 2007; Snoeck et al, 2009; Dr. Rial, 2011; Dr. Soriano-Segarra, 2013; Riera et al, 2013).

LPF Before Pregnancy

Before getting pregnant, it is advisable to consider a few factors such as sexual satisfaction and an increased possibility of fertilization.

The pelvic floor muscular tone is paramount to the proper support of the internal organs and a satisfactory sexual function. More tone means more friction and more sensations. The pelvic floor tone increment achieved with LPF is 58% on the base tone and 48% on the load tone.

A greater proprioception of the pelvic floor, and blood flow increments, are two important aspects related to the sensations felt during sexual intercourse.

Currently, it can be observed that approximately 40% of fertility problems are due to sperm quality. The lack of an effective, progressive and optimal exercise program is cause of sterility or difficulty becoming pregnant, according to Dr. Buenaventura Coroleu, head of the Reproduction Medical Service from Dexeus Hospital Women's Health Center in Barcelona.

Keeping in mind that LPF could reduce the pressure to 70mm Hg, if the woman executes it in a facilitatory position at the ejaculation moment, this powerful "diaphragmatic aspiration" can be of great help to the spermatozoids in reaching the egg.



LPF After Labor

LPF was created to speed up safely and effectively the recovery process after labor.

LPF is very useful and essential in some aspects of postpartum recovery:

- Recovery of the posture due to weight gain
- Reduction in waist size
- Recovery of the pelvic floor tone and the sexual function
- Reduction of ligamentous tension, very useful in prolapses
- Reduction or restraint of urinary incontinence
- Improvement in the lower limbs' vascularization
- Prevention of postpartum depression
- Reduction of surgery impacts during labor

Postural improvements are very evident in about a month. It's possible to observe a repositioning of the gravity axis projection, a decrease in the lumbar lordotic and cervical arrows, and dorsal kyphosis. Lateral deviations are less important, but postural comfort, better mobility, greater flexibility, and less pain are referred to and quantified by research.



Waist size reductions have been observed even in people who have not been pregnant. The results have been outstanding, with four to ten cm reduction in two to six months of exercise as observed in several studies (Dr. Rial and Pinsach, 2012, Dr. Soriano-Segarra, 2012, Álvarez et al, 2012).

The increase in the pelvic floor tone mentioned by Dr. Rial (2012) was achieved by Esparza in 2007 by applying an HT protocol on a group of 100 women (average age 36 years) who suffered from urinary incontinence and pelvic floor low tone. The study concluded that after 20 minutes a day of hypopressives exercises during a period of six months, there was an increase of the contractile strength (20%), the base tone (58%) and the load tone or “suspension capacity” in over 48% of the trainees.

The intra-abdominal pressure decrease triggers the toning of the abdominal muscles and the perineal musculature, and exerts suction over the pelvic organs through the diaphragmatic elevation, thus reducing ligamentous tension (Esparza, 2002 and cited in Dr. Rial, 2012). This decrease is very useful in stopping and avoiding prolapses. Nuria Sans, head of the Dexeus Pelvic Floor Physiotherapy Unit, states this method efficacy in prolapses treatment in her “Jornada sobre Hipopresivos” in the CAR of Sant Cugat.

Urinary incontinence after labor is very common, however, LPF has been proven to be very useful for stopping this symptomatology. A study conducted by Fernández, (2007) applied Hypopressives on a group of people older than 60 (N=24; average=68.5 years old) who performed 20 minutes HT daily during a period of 6 month period. These results showed the following; an improvement in the rest tone of SP (23.5%), in the load tome (25.3%), in the perineal blockage to the effort (108.4%) and a reduction of urinary incontinence symptoms (85.7%).

Most recently, Dr. Rial and Pinsach (2010) confirmed the aforementioned results on reduction of urine losses in an intergroup study (N=126; average = 43 years old), where a daily 30 minutes DH practice three times a week during a period of three months resulted in a notable reduction of the symptoms of urinary incontinence against the control group and the pilates group who showed no improvement (Rial, 2012).

LPF is efficient in avoiding and resolving venous return problems that are so common during the last phases of the pregnancy and postpartum period. They have a positive influence on the vascularization of the lower limbs (Caufriez, Governo and Rondeux 1991; Snoeck, Philipot, Caufriez and Balestra, 2009).

In order to slow down or prevent the possibility of postpartum depression, we rely on the LPF due to its action over the neurovegetative system. Sympathetic stimulation is high, and the normalization of the diaphragm tone which was subjected to so much tension during labor, brings a well-being feeling very fulfilled at this stage. Recently (Riera et al, 2013) it was proven that through Hypopressive practice



there is a 64% increase in self-esteem, a 40% reduction in anxiety and a 32% reduction in cognitive anxiety when compared to the control group.

For those women who have undergone surgery such as cesarean section or episiotomy, LPF helps minimize the impact on intra-abdominal pressure reduction and myofascial tissue traction, helping to diminish tissue adhesions and internal scars.